UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Toxicological Review of HW08A Data — 19 July 2012
Dimock, PA

FROM: Dawn A. Ioven, toxicologist
Technical Support Branch (3HS41)

TO: Rich Fetzer, OSC
Eastern Response Branch (3HS31)

On 3 July 2012, U.S. EPA collected samples from HW08A in Dimock. These samples were collected from the wellhead and tap, and analyzed for manganese. (Note that this residence has a pre-existing treatment system and also receives bulk water as an alternate supply.) Analytical results were validated and compared to risk-based screening levels and/or standards for public drinking water. Findings are presented below.

Manganese

Unfiltered and filtered wellhead samples contained manganese at 1150 to 1170 ug/L. Manganese was observed in tap samples at much lower concentrations, 176 ug/L (unfiltered) and 132 ug/L (filtered). The risk-based screening level for manganese is 320 ug/L (at a Hazard Quotient of 1). Additionally, a non-enforceable drinking water standard of 50 ug/L exists for manganese; this standard is based on aesthetic considerations, such as taste and smell, rather than adverse health endpoints. Since tap concentrations are less than the risk-based comparison criterion (320 ug/L), no detrimental effects associated manganese are expected at HW08A.

Note that the July 2012 wellhead results for HW08A are consistent with data collected in May 2012, where manganese was detected in wellhead samples at concentrations of 942 ug/L (unfiltered) and 915 ug/L (filtered). During the 25 January 2012 sampling event, however, manganese was reported at levels well below risk-based triggers, 64.3 ug/L (unfiltered) and 64 ug/L (filtered).

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